

CLAIMS:

1. A method of purifying lithium sulfide wherein lithium sulfide obtained by reacting lithium hydroxide with hydrogen sulfide in an aprotic organic solvent is washed with an organic solvent at a temperature of 100°C or higher.
2. The method of purifying lithium sulfide according to claim 1, wherein the organic solvent used for washing is an aprotic polar solvent.
3. The method of purifying lithium sulfide according to claim 2, wherein the organic solvent used for washing is N-methyl-2-pyrrolidone (NMP).
4. Lithium sulfide obtained by the method of purifying lithium sulfide according any one of claims 1 to 3, wherein total content of sulfur oxides is 0.15 % by weight or less and lithium N-methylaminobutyrate (LMAB) content is 0.1 % by weight or less.
5. A solid electrolyte for a lithium rechargeable battery using the lithium sulfide according to claim 4.
6. The solid electrolyte for a lithium rechargeable battery according to claim 5, wherein the ionic conductance is 1×10^{-3} S/cm or higher.
7. A solid battery using the solid electrolyte for a lithium rechargeable battery according to claim 5.

8. A solid battery using the solid electrolyte for a lithium rechargeable battery according to claim 6.